

# **PREDICTION OF RADIATION SWELLING OF VVER-1000 REACTORS BAFFLE RING FOR SERVICE LIFE UP TO 30 – 60 YEARS**

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In the paper based of data concerning the swelling of steel 18Cr10NiTi under irradiation in BOR-60 fast reactor and ESUVI heavy ion accelerator prediction dependence of swelling from the temperature and irradiation dose in the wide range of dose rates is presented. These are used to calculate the cross-sectional swelling of the baffle ring of VVER-1000 reactor during extended service life 30 - 60 years.

*Keywords:* austenitic steel, pressure vessel internals, ion irradiation, reactor irradiation, modeling function.